

CLAIMS

What is claimed is:

1. A improved game ball comprising:
a central core;
a first mantle layer surrounding said central core; and
a cover surrounding said first mantle layer.
2. The improved game ball as described in claim 1, wherein said central core comprises a first urethane composition.
3. The improved game ball as described in claim 2, wherein said first urethane composition includes a first mixture of a polyol and an isocyanate.
4. The improved game ball as described in claim 1, wherein said first mantle layer comprises a second urethane composition.
5. The improved game ball as described in claim 4, wherein said first urethane composition includes a second mixture of a polyol and an isocyanate.
6. The improved game ball as described in claim 2 further comprising:
a second mantle layer surrounding said first mantle layer, said second mantle layer positioned between said first mantle layer and said cover.
7. The improved game ball as described in claim 5, wherein said second mantle layer comprises a third urethane composition.
8. The improved game ball as described in claim 7, wherein said third urethane composition includes a first mixture of a polyol and an isocyanate.
9. The improved game ball as described in claim 5 wherein said central core comprises a diameter substantially between 3.40 inches and 3.44 inches.
10. The improved game ball as described in claim 5 wherein said first mantle layer comprises a thickness of substantially between 0.05 inches and 0.500 inches.
11. The improved game ball as described in claim 5 wherein said second mantle layer comprises a thickness of substantially between 0.05 inches and 0.25 inches.
12. The improved game ball as described in claim 1, wherein said composite core has a coefficient of restitution at 88 feet-per-second within the range of 0.40 and 0.50.
13. The improved game ball as described in claim 1, wherein the compression of said softball is less than 475 pounds.

14. A multi-layer softball comprising:
 - a composite core including a central core having a first urethane composition and a first mantle layer having a second urethane composition; and
 - a cover surrounding said composite core.
15. The multi-layer softball as described in claim 14 further comprising:
 - a second mantle layer surrounding said first mantle layer, said second mantle layer positioned between said first mantle layer and said cover.
16. The multi-layer softball as described in claim 15, wherein said second mantle layer comprises a third urethane composition.
17. The multi-layer softball as described in claim 14 wherein said central core comprises a diameter substantially between 3.40 inches and 3.44 inches.
18. The multi-layer softball as described in claim 14 wherein said first mantle layer comprises a thickness of substantially between 0.05 inches and 0.500 inches.
19. The multi-layer softball as described in claim 14, wherein said composite core has a coefficient of restitution at 88 feet-per-second within the range of 0.40 and 0.50.
20. The multi-layer softball as described in claim 1, wherein the compression of said softball is less than 475 pounds.